

(12) United States Patent

Brereton et al.

(54) **AUTO-INJECTOR**

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(57)ABSTRACT

An auto-injector for administering a dose of a liquid medicament (M) is presented having a tubular chassis telescopable in an elongate chassis, a carrier subassembly comprising a tubular carrier slidably arranged partially inside the chassis and inside the case, where the carrier is adapted to contain a syringe with a hollow injection needle, a drive spring and a plunger for forwarding load of the drive spring to a stopper of the syringe, wherein the syringe is lockable for joint axial translation with the carrier. The auto-injector also has a control spring arranged around the carrier, a needle insertion control mechanism for coupling a proximal end of the control spring to either the carrier for advancing it for needle insertion or to the chassis, wherein the needle insertion control mechanism comprises a first collar biased (Continued)

